

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017735**Date Inspected:** 27-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER & OBG Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

**TOWER JETTY**

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 3A located on East tower Lift-4 Skin 'A', 119 M Cross bracing gusset plate WD1 – GUSA3 – 3 – 119M – E. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – Tc – U5b – FCM.

Weld joint # 3A located on South tower Lift-4 Skin 'A', 119 M Cross bracing gusset plate WD1 – GUSA3 – 3 – 119M – S. Welder is identified as 040365. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – Tc – U5b – FCM.

Weld joint # 3A located on West tower Lift-4 Skin 'A', 119 M Cross bracing gusset plate WD1 – GUSA3 – 3 – 119M – W. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – Tc – U5b – FCM.

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Weld joint # 4A located on North tower Lift-4 Skin 'E', 119 M Cross bracing gusset plate WD1 – GUSA3 – 3 – 119M – N. Welder is identified as 057220. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – Tc – U5b – FCM.

Weld joint # 4A located on South tower Lift-4 Skin 'E', 119 M Cross bracing gusset plate WD1 – GUSA3 – 3 – 119M – S. Welder is identified as 040365. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – Tc – U5b – FCM.

Weld joint # 3A located on North tower Lift-4 Skin 'E', 119 M Cross bracing gusset plate WD1 – GUSA3 – 3 – 119M – N. Welder is identified as 056200. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – Tc – U5b – FCM. (See attached photo)

### BAY#10

#### ORTHOTROPIC BOX GIRDER (OBG) AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 24 located on Bike Path, BK004A6 – 025. Welder is identified as 057180. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 48 located on Bike Path, BK004A6 – 029. Welder is identified as 040302. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

Weld joint # 03 located on Bike Path, BK004A2 – 025. Welder is identified as 052075. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 109 located on Bike Path, BK004A6 – 029. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

### BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Repair welding of weld joint # 13A/B located on Lift-5 Bracket SD1 – BRSA5 – 1 as per the weld repair report #T-WR3734. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Lang. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – Repair – 1.

Repair welding of weld joint # 14A/B located on Lift-5 Bracket SD1 – BRSA5 – 1 as per the weld repair report

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#T-WR3735. Welder is identified as 202100. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Lang. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – Repair – 1.

### ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 43 located on Bike Path BK004A1 – 023. Welder is identified as 040704. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

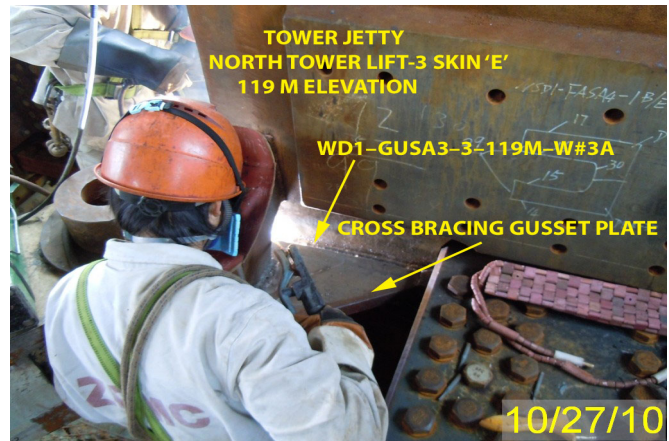
### Witness of Magnetic Particle Testing (MT)

This QA inspector Witnessed 100% MT performed by ZPMC Quality Control personnel. The member is identified as OBG Component. The component designation is identified as follows:

BIKE PATH : BK004A1 – 022 – 044

(See attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Sandeep

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer